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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,021	11/13/2001	Daniel J. huslig	LITTLE1180	6522

25548 7590 08/03/2004

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT PAPER NUMBER

2686

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,021

Applicant(s)

HUSLIG

Examiner

Joy K Contee

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 0993021.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-113 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-22,42-45,61-64,84-87 and 107-110 is/are allowed.
- 6) ☒ Claim(s) 1-9,14-18,23-31,37-41,46-51,56-60,65-70,79-83,88-93,102-106 and 111-113 is/are rejected.
- 7) ☒ Claim(s) 10-13,32-36,52-55,71-78 and 94-99 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9, 23- 31,46-51, 65-70,88-93 are rejected under 35 U.S.C. 102(e) as being anticipated by Porter et al. (Porter), U.S. Patent No. 6,687,503.

Regarding claims 1,23, 46,65,88, Porter discloses a method (and apparatus) comprising: communicating (and/or exchanging a link signal and/or a link communication interface configured to communicate), in a first communication direction (i.e., upstream), with a base station (or distribution station) (i.e., access point) using an inherent, link frequency within a first frequency bandwidth (i.e., reads on frequency outside the operating band of subscriber terminal) allocated for communication with a mobile station in a second communication direction (i.e., downstream) (col. 4,lines 33-51 and col. 5, line 47 to col. 6,line 2 and lines 31-57).

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Regarding claims 2,24,47,66,89, Porter discloses a method in accordance with claims 1, 23, 46,65,88, respectively, further comprising: communicating, in the first communication direction (i.e., upstream), with the mobile station inherently, using a coverage signal within a second frequency bandwidth allocated (i.e., reads on frequency outside or within the operating band of the access point) for communication with a mobile station in first communication direction (col. 4,lines 33-51).

Regarding claims 3, 25,48,67,90, Porter discloses a method in accordance with claims 2,24,47,66,89, respectively, wherein the communicating in the first communication direction with the base station comprises: exchanging a link signal corresponding to a coverage signal exchanged with the mobile station (col. 4,lines 47-51 and col. 5,lines 47-60).

Regarding claims 4,26,68,91, Porter discloses a method in accordance with claims 3, 25,67,90, respectively, further comprising: communicating, in the second communication direction (i.e., downstream), with the base station using a second link frequency within the second frequency bandwidth allocated for communication with a mobile station in the first communication direction (col. 4,lines 33-51).

Regarding claim 5,27,48,69,92, Porter discloses a method in accordance with claims 4,26,49,68,91, wherein the communicating, in the second communication direction (i.e., downstream), with the base station comprises: exchanging a second link signal corresponding to a second coverage signal

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exchanged with the mobile station in the second communication direction (col. 4, lines 33-51 and col. 5, lines 48-60).

Regarding claims 6, 28, 70, 93 Porter discloses a method in accordance with claims 5, 27, 69, 92 wherein: the first communication direction is upstream, the second communication direction is downstream, the link frequency is an upstream link frequency; the first frequency bandwidth is a downstream frequency bandwidth allocated for downstream communication with the mobile station, and the second frequency bandwidth is an upstream frequency bandwidth allocated for upstream communication with the mobile station (col. 4, lines 33-51 and col. 5, lines 48-60 and col. 6, lines 30-40).

Regarding claims 7, 29 and 49, Porter discloses a method in accordance with claims 6, 28, 48, wherein the communicating in a first communication direction comprises: transmitting an upstream link signal at the upstream link frequency to the base station, the upstream link signal corresponding to an upstream coverage signal received from the mobile station within the upstream frequency bandwidth (col. 6, lines 30-40).

Regarding claims 8, 30 and 50, Porter discloses a method in accordance with claims 7, 29 and 49, wherein the communicating in the first communication direction with the mobile station comprises: receiving the upstream coverage signal from the mobile station (col. 4, lines 5-20 and col. 5, lines 48-60).

Regarding claim 9, 31 and 51, Porter discloses a method in accordance with claims 8, 30 and 50, wherein the communicating in the second communication direction with the base station comprises: receiving a

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downstream link signal at a downstream link frequency within the upstream frequency bandwidth, the downstream link signal corresponding to a downstream coverage signal transmitted to the mobile station within the downstream frequency bandwidth (col. 5, lines 48-60 and col. 6, lines 30-40).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 14-18, 37-41, 56-60, 79-83, 102-106 and 111-113 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/991,720 (Pub No. US 2002/0058476). Although the conflicting claims are not identical, they are not patentably distinct from each other because independent claim 1 of '720 encompasses the scope of independent claims 14, 37, 56, 79, 102, 111 and 112 of the instant application.

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Independent claims 14,37,56,79,102,111 and 112 of the instant application disclose generally : receiving, from a mobile station, an upstream coverage signal at an upstream coverage frequency within an upstream frequency bandwidth allocated for upstream communication with the mobile station; and transmitting, to a base station, an upstream link signal at an upstream link frequency within a downstream frequency bandwidth allocated for downstream communication with the mobile station, the upstream link signal corresponding to the upstream coverage signal and vice versa, receiving, from a cellular base station, a downstream coverage signal at a downstream coverage frequency within a downstream frequency bandwidth allocated for downstream communication with the mobile station; and transmitting, to a distribution station, a downstream link signal at an downstream link frequency within an upstream frequency bandwidth allocated for upstream communication with the mobile station, the downstream link signal corresponding to the downstream coverage signal. Wherein, claim 1 of '720 discloses receiving at a coverage frequency a coverage signal having a coverage signal upper-sideband and a coverage signal lower-sideband; forming a link signal at a link frequency the link signal comprising a link signal upper sideband corresponding to the coverage signal lower-sideband corresponding to the coverage signal upper-sideband. The upper-sideband and lower-sideband in '720 anticipates that instant application's first and second frequency bandwidth allocated for communication in a first and second communication direction, respectively.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Omission of element and its function in combination is obvious expedient if remaining elements perform same functions as before. In re KARLSON (CCPA) 136 USPQ 184 (1963).

Allowable Subject Matter

5. Claims 19-22,42-45,61-64,84-87,107-110 are allowed.
6. Claims 10-13,32-36,52-55 and 71-78,94-101 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bahrenburg et al., U.S. Patent No. 6,721,294, discloses a method and device for allocating channels in a CDMA radiocommunications system.

Langston et al., U.S. Patent No. 6,272,351, discloses a system and method for relaying signals to base stations in a wireless communication system.

Kumar, U.S. Patent No. 6,246,698, discloses a in-band on-channel digital broadcasting.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is

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703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joy Contee

July 24, 2004


CHARLES APPIAH
PRIMARY EXAMINER